Book Review



Avoided Deforestation: Prospects for Mitigating Climate Change, edited by Charles Palmer and Stefanie Engels, Milton Park, Abingdon, Oxon and New York: Routledge, Taylor & Francis Group, 2009, 258 pp., \$170.00 (hardback or eBook)

Reviewed by Dr. Richard Betts

Avoided deforestation, excluded from the Kyoto Protocol as a potential to help mitigate climate change, has now returned to the climate policy agenda once again. It is, however, fraught with complexity, particularly in the economics and politics surrounding its implementation and likely effectiveness. As a climate scientist specializing in the effects of ecosystem change on climate and vice versa, I have developed some awareness of the various issues and difficulties in the economic and policy areas, but have had little indepth knowledge. *Avoided Deforestation*, edited by Charles Palmer and Stefanie Engels, has helped fill that gap in my knowledge.

The chapters, written by researchers and scientists with backgrounds in economics, environmental sciences, and climate policies, cover a wide range of issues and begin with the convincing reasons for financing avoided deforestation as part of the international community's attempts to slow climate change. Following extensive discussions of the difficulties in actually making avoided deforestation happen, the book then moves on to the potential solutions and case studies.

In several cases the same issue is covered from different angles by different authors, which I found particularly useful for someone from outside the field. (One never knows whether a particular result or opinion is representative of the mainstream or an outlier – either of which may be fine, but it is useful to be able to judge.) So it was valuable to read three chapters on the cost effectiveness of avoided deforestation as a mitigation policy. All three used different approaches, but all came to broadly the same conclusion: that avoided deforestation is cost-effective in comparison to other mitigation options, but that the cost-benefit analyses were contingent on successfully overcoming certain barriers, including actually sourcing the funding and dealing with the natural tendency of humans and institutions to cheat.

A major theme running through the book is that of the difficulty of setting baselines. Essentially the problem lies in establishing what would have happened in the absence of the incentives to avoid deforestation. While my own perspective would naturally lead me to focus on the scientific and technical aspects of this – such as how much deforestation is actually occurring and what this means for emissions – the authors focus on establishing effective incentives to avoid deforestation while trying to avoid introducing perverse incentives or penalizing those who already protect forests without outside incentives. The greater the baseline deforestation is, the larger the reward for avoiding it – a situation that is a huge political challenge. Part of the political challenge is the need for objective scientific evidence. Progress has been made in recent years, which is partly why avoided deforestation is now back on the political agenda, but to meet the more stringent requirements for evidence-based policy, more work is needed.

Another key theme is seeing the climate mitigation problem as part of the bigger picture. The editors build on the chapter contributions of various authors and offer their own perspectives on the role of avoided deforestation in relation to other mitigation measures. They make the point that while avoided deforestation is cost-effective, this effectiveness depends on the successful implementation of a wider range of mitigation measures, so they argue that avoided deforestation should be seen as a necessary part of a wider portfolio of measures and not just in isolation.

Links to conservation and poverty alleviation are also part of the bigger picture. Synergies between climate change mitigation and existing activities to protect forests for additional motives make intuitive sense for lots of reasons, and it is useful to see case studies presented here that clearly demonstrate this relationship.

One poignant aspect of this book is its posthumous publication of the contribution of Bernhard Schlamadinger. Although he and I knew each other by reputation, we only met once – however that coincided with an important moment in history. At the 2007 UN Climate Change Conference in Bali, we found ourselves seated together in the audience for the live video link to Oslo for the presentation of the Nobel Peace Prize to the IPCC and Al Gore. Since we were both lead authors on the IPCC 4th Assessment Report, and both wrote on land cover change issues, but from different perspectives and in different volumes, we were equally proud to watch the presentation of the award from within the policy conference where the implications of the IPCC's work were being addressed by the world's governments. Indeed it was at the Bali conference where REDD came firmly back on the UNFCCC agenda. Reading Bernhard's chapter reminded me of this globally significant moment for forests that I shared with one of the great scientific contributors to the debate.

Overall I found this a useful, interesting, and readable introduction to the political and economic complexities surrounding the practice of avoided deforestation as a means to reduce climate change. The content is accessible to non-specialists with a general interest in the topic and basic background knowledge, so it ought to appeal to students and policy stakeholders who want to rapidly get up to speed on this important topic. In addition, scientists working in related fields should find it a valuable aid in putting their work in context and for suggesting areas that require more robust evidence or technical advances.

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